



Swine-origin Influenza A (H1N1) Virus: Interim Guidance for Medical Examiners May 6, 2009

On May 6th, the Centers for Disease Control and Prevention reported 642 confirmed cases of swine-origin influenza A (H1N1) virus (S-OIV) in the United States, including 2 deaths. Most people have no immunity to this new virus so more cases, more hospitalizations and more deaths may occur.

The Washington State Department of Health requests that medical examiners in the state help detect deaths due to this new virus by immediately reporting all unexplained deaths due to severe respiratory illness, respiratory failure, or pneumonia to your local health jurisdiction. Pediatric cases are of particular interest.

After reporting the death to your local health jurisdiction, do the following:

- As soon as possible after death, obtain a nasopharyngeal specimen using a synthetic (not cotton or calcium alginate) swab and place in viral transport medium. This specimen should be refrigerated (not frozen). In addition, collect and store serum (if available).
- During autopsy, obtain a tracheal specimen using a synthetic (not cotton or calcium alginate) swab and place in viral transport medium. In addition, collect lung tissue (fresh-frozen and fixed) and specimens from other organs showing pathology. Obtain any additional appropriate cultures.

Note: Viral antigens and nucleic acids may be focal and sparsely distributed in patients with influenza. Larger airways (*particularly primary and segmental bronchi*) have the highest yield for detection of influenza viruses by IHC staining. In comparison, viral RNA is more commonly detected in lower airways. Therefore, lung specimens representing samples from each of the following sites should be obtained: central (hilar) lung with segmental bronchi, right and left primary bronchi, trachea (proximal and distal), and representative pulmonary parenchyma from right and left lung.

- Ship the nasopharyngeal and tracheal specimens cold with a completed virology form (<http://www.doh.wa.gov/EHSPHL/PHL/Forms/SerVirHIV.pdf>) to:

Washington State Public Health Laboratories Attn: Virology Lab
1610 NE 150th Street
Shoreline, WA 98155

- Store the lung tissue (fresh-frozen and fixed) and serum for further testing if needed.

Use standard and contact precautions when collecting the above specimens. In addition, wear a respirator (e.g., N95 mask) when performing a procedure which could result in aerosolization of tissue.

For more information regarding the submission of tissue specimens for the pathologic evaluation of influenza virus infections, see:

<http://www.cdc.gov/h1n1flu/tissuesubmission.htm>